

<b>S = 4000</b>		<b>Rolled or Machined Cylinders</b>								© 2003 Pressure Vessel Engineering Ltd. <a href="http://www.pveng.com">www.pveng.com</a>										
no undertolerance removed, no corrosion allowance, ASME VIII-1 App 1-1		Phone: (519)-880-9808 Fax: (519) 880-9810																		
Head Thickness		0.063	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	Inch
Max PSI at E=1.00		41.8	84.0	126.9	169.5	213	256	300	345	435	526	619	714	811	909	1009	1111	1321	1538	PSI
Max PSI at E=0.85		35.6	71.4	107.9	144.1	181	218	255	293	370	447	527	607	689	773	858	944	1123	1308	PSI
Max PSI at E=0.7		29.3	58.8	88.8	118.6	149	179	210	241	304	368	434	500	568	636	706	778	925	1077	PSI
<b>12"</b>	Volume	0.77	0.75	0.74	0.72	0.71	0.69	0.68	0.66	0.63	0.60	0.57	0.55	0.52	0.49	0.47	0.44	0.39	0.35	ft^3/ft
	Weight	8.0	15.9	23.7	31.4	39.1	46.6	54.1	61.5	76.0	90.2	104.1	117.6	130.8	143.7	156.2	168.4	191.8	213.8	Lb/ft cs
Max PSI at E=1.00		27.9	55.9	84.3	112.4	140.8	169.5	198.3	227	286	345	405	465	526	588	651	714	843	976	PSI
Max PSI at E=0.85		23.7	47.5	71.6	95.5	119.7	144.1	168.6	193	243	293	344	395	447	500	553	607	717	829	PSI
Max PSI at E=0.7		19.5	39.1	59.0	78.7	98.6	118.6	138.8	159	200	241	283	326	368	412	456	500	590	683	PSI
<b>18"</b>	Volume	1.74	1.72	1.69	1.67	1.65	1.62	1.60	1.58	1.53	1.48	1.44	1.40	1.35	1.31	1.27	1.23	1.15	1.07	ft^3/ft
	Weight	12.0	23.9	35.8	47.4	59.1	70.7	82.2	93.6	116.1	138.3	160.2	181.8	203.0	223.9	244.4	264.6	304.0	342.1	Lb/ft cs
Max PSI at E=1.00		20.9	41.8	63.1	84.0	105.3	126.6	148.0	169.5	213	256	300	345	390	435	480	526	619	714	PSI
Max PSI at E=0.85		17.7	35.6	53.6	71.4	89.5	107.6	125.8	144.1	181	218	255	293	331	370	408	447	527	607	PSI
Max PSI at E=0.7		14.6	29.3	44.1	58.8	73.7	88.6	103.6	118.6	149	179	210	241	273	304	336	368	434	500	PSI
<b>24"</b>	Volume	3.11	3.08	3.04	3.01	2.98	2.95	2.92	2.89	2.82	2.76	2.70	2.64	2.58	2.52	2.46	2.41	2.29	2.18	ft^3/ft
	Weight	16.0	31.9	47.9	63.5	79.1	94.7	110.2	125.6	156.2	186.4	216.3	245.9	275.1	304.0	332.6	360.8	416.3	470.4	Lb/ft cs
Max PSI at E=1.00		16.7	33.4	50.4	67.1	84.0	101.0	118.0	135.1	169.5	204	239	274	309	345	381	417	490	563	PSI
Max PSI at E=0.85		14.2	28.4	42.8	57.0	71.4	85.9	100.3	114.9	144.1	173	203	233	263	293	324	354	416	479	PSI
Max PSI at E=0.7		11.7	23.4	35.3	47.0	58.8	70.7	82.6	94.6	118.6	143	167	192	216	241	266	292	343	394	PSI
<b>30"</b>	Volume	4.87	4.83	4.79	4.75	4.71	4.67	4.63	4.59	4.51	4.43	4.35	4.28	4.20	4.12	4.05	3.98	3.83	3.69	ft^3/ft
	Weight	20.0	39.9	59.9	79.5	99.2	118.8	138.3	157.7	196.3	234.6	272.5	310.1	347.3	384.2	420.8	457.1	528.6	598.7	Lb/ft cs
Max PSI at E=1.00		13.9	27.9	42.0	55.9	69.9	84.0	98.2	112.4	140.8	169.5	198.3	227	256	286	315	345	405	465	PSI
Max PSI at E=0.85		11.8	23.7	35.7	47.5	59.4	71.4	83.5	95.5	119.7	144.1	168.6	193	218	243	268	293	344	395	PSI
Max PSI at E=0.7		9.7	19.5	29.4	39.1	49.0	58.8	68.7	78.7	98.6	118.6	138.8	159	179	200	221	241	283	326	PSI
<b>36"</b>	Volume	7.02	6.97	6.92	6.87	6.83	6.78	6.73	6.68	6.59	6.49	6.40	6.31	6.21	6.12	6.03	5.94	5.76	5.59	ft^3/ft
	Weight	24.0	47.9	72.0	95.6	119.2	142.8	166.3	189.8	236.4	282.7	328.6	374.2	419.5	464.4	509.0	553.3	640.8	727.0	Lb/ft cs
Max PSI at E=1.00		11.9	23.9	35.9	47.8	59.9	71.9	84.0	96.2	120.5	144.9	169.5	194.2	219	244	269	294	345	396	PSI
Max PSI at E=0.85		10.1	20.3	30.5	40.7	50.9	61.2	71.4	81.7	102.4	123.2	144.1	165.0	186	207	229	250	293	337	PSI
Max PSI at E=0.7		8.3	16.7	25.2	33.5	41.9	50.4	58.8	67.3	84.3	101.4	118.6	135.9	153	171	188	206	241	277	PSI
<b>42"</b>	Volume	9.56	9.51	9.45	9.39	9.34	9.28	9.22	9.17	9.06	8.95	8.84	8.73	8.62	8.51	8.40	8.30	8.08	7.88	ft^3/ft
	Weight	28.0	56.0	84.0	111.6	139.3	166.9	194.4	221.9	276.5	330.8	384.7	438.4	491.7	544.6	597.2	649.5	753.1	855.3	Lb/ft cs
Max PSI at E=1.00		10.4	20.9	31.4	41.8	52.4	62.9	73.5	84.0	105.3	126.6	148.0	169.5	191.1	213	235	256	300	345	PSI
Max PSI at E=0.85		8.9	17.7	26.7	35.6	44.5	53.5	62.4	71.4	89.5	107.6	125.8	144.1	162.4	181	199	218	255	293	PSI
Max PSI at E=0.7		7.3	14.6	22.0	29.3	36.6	44.0	51.4	58.8	73.7	88.6	103.6	118.6	133.8	149	164	179	210	241	PSI
<b>48"</b>	Volume	12.50	12.44	12.37	12.31	12.24	12.18	12.11	12.05	11.92	11.79	11.67	11.54	11.42	11.29	11.17	11.04	10.80	10.56	ft^3/ft
	Weight	32.0	64.0	96.1	127.6	159.3	190.9	222.5	253.9	316.6	378.9	440.9	502.5	563.8	624.8	685.4	745.8	865.4	983.6	Lb/ft cs
Max PSI at E=1.00		9.3	18.6	27.9	37.2	46.5	55.9	65.2	74.6	93.5	112.4	131.3	150.4	169.5	188.7	208	227	266	305	PSI
Max PSI at E=0.85		7.9	15.8	23.7	31.6	39.5	47.5	55.5	63.4	79.4	95.5	111.6	127.8	144.1	160.4	177	193	226	260	PSI
Max PSI at E=0.7		6.5	13.0	19.6	26.0	32.6	39.1	45.7	52.2	65.4	78.7	91.9	105.3	118.6	132.1	146	159	186	214	PSI
<b>54"</b>	Volume	15.83	15.76	15.68	15.61	15.54	15.47	15.39	15.32	15.18	15.03	14.89	14.75	14.61	14.47	14.33	14.19	13.91	13.64	ft^3/ft
	Weight	36.0	72.0	108.2	143.7	179.4	215.0	250.5	286.0	356.7	427.0	497.0	566.7	636.0	705.0	773.7	842.0	977.6	1111.9	Lb/ft cs

For Preliminary Use Only --- Contact Pressure Vessel Engineering Ltd. for pressure vessel design and drafting --- Use at your own risk

<b>S = 4000</b>		<b>Rolled or Machined Cylinders</b>								© 2003 Pressure Vessel Engineering Ltd. <a href="http://www.pveng.com">www.pveng.com</a>										
no undertolerance removed, no corrosion allowance, ASME VIII-1 App 1-1		Phone: (519)-880-9808 Fax: (519) 880-9810																		
Head Thickness		0.063	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	Inch
Max PSI at E=1.00		8.3	16.7	25.1	33.4	41.8	50.3	58.7	67.1	84.0	101.0	118.0	135.1	152.3	169.5	186.8	204	239	274	PSI
Max PSI at E=0.85		7.1	14.2	21.4	28.4	35.6	42.7	49.9	57.0	71.4	85.9	100.3	114.9	129.4	144.1	158.7	173	203	233	PSI
Max PSI at E=0.7		5.8	11.7	17.6	23.4	29.3	35.2	41.1	47.0	58.8	70.7	82.6	94.6	106.6	118.6	130.7	143	167	192	PSI
<b>60"</b>	Volume	19.55	19.47	19.39	19.31	19.23	19.15	19.07	18.99	18.83	18.67	18.51	18.35	18.19	18.03	17.88	17.72	17.41	17.10	ft^3/ft
	Weight	40.1	80.0	120.2	159.7	199.4	239.1	278.6	318.1	396.8	475.1	553.1	630.8	708.2	785.2	861.9	938.2	1089.9	1240.2	Lb/ft cs
Max PSI at E=1.00		7.6	15.2	22.8	30.4	38.0	45.7	53.3	61.0	76.3	91.7	107.2	122.7	138.2	153.8	169.5	185.2	217	248	PSI
Max PSI at E=0.85		6.4	12.9	19.4	25.8	32.3	38.8	45.3	51.8	64.9	78.0	91.1	104.3	117.5	130.8	144.1	157.4	184	211	PSI
Max PSI at E=0.7		5.3	10.6	16.0	21.3	26.6	32.0	37.3	42.7	53.4	64.2	75.0	85.9	96.8	107.7	118.6	129.6	152	174	PSI
<b>66"</b>	Volume	23.67	23.58	23.49	23.40	23.31	23.22	23.13	23.04	22.87	22.69	22.52	22.34	22.17	21.99	21.82	21.65	21.31	20.97	ft^3/ft
	Weight	44.1	88.0	132.3	175.7	219.5	263.1	306.7	350.2	436.9	523.2	609.3	695.0	780.3	865.4	950.1	1034.4	1202.2	1368.5	Lb/ft cs
Max PSI at E=1.00		6.9	13.9	20.9	27.9	34.8	41.8	48.8	55.9	69.9	84.0	98.2	112.4	126.6	140.8	155.1	169.5	198.3	227	PSI
Max PSI at E=0.85		5.9	11.8	17.8	23.7	29.6	35.6	41.5	47.5	59.4	71.4	83.5	95.5	107.6	119.7	131.9	144.1	168.6	193	PSI
Max PSI at E=0.7		4.9	9.7	14.7	19.5	24.4	29.3	34.2	39.1	49.0	58.8	68.7	78.7	88.6	98.6	108.6	118.6	138.8	159	PSI
<b>72"</b>	Volume	28.18	28.08	27.98	27.88	27.79	27.69	27.59	27.49	27.30	27.11	26.92	26.73	26.53	26.34	26.16	25.97	25.59	25.22	ft^3/ft
	Weight	48.1	96.1	144.3	191.8	239.5	287.2	334.7	382.2	477.0	571.3	665.4	759.1	852.5	945.6	1038.3	1130.7	1314.4	1496.8	Lb/ft cs
Max PSI at E=1.00		6.4	12.8	19.3	25.7	32.2	38.6	45.1	51.5	64.5	77.5	90.6	103.6	116.7	129.9	143.0	156.3	182.8	209	PSI
Max PSI at E=0.85		5.5	10.9	16.4	21.9	27.3	32.8	38.3	43.8	54.8	65.9	77.0	88.1	99.2	110.4	121.6	132.8	155.4	178	PSI
Max PSI at E=0.7		4.5	9.0	13.5	18.0	22.5	27.0	31.6	36.1	45.2	54.3	63.4	72.5	81.7	90.9	100.1	109.4	127.9	147	PSI
<b>78"</b>	Volume	33.08	32.97	32.86	32.76	32.65	32.55	32.44	32.34	32.13	31.92	31.71	31.50	31.30	31.09	30.88	30.68	30.27	29.87	ft^3/ft
	Weight	52.1	104.1	156.4	207.8	259.6	311.2	362.8	414.3	517.0	619.5	721.5	823.3	924.7	1025.7	1126.5	1226.9	1426.7	1625.2	Lb/ft cs
Max PSI at E=1.00		6.0	11.9	17.9	23.9	29.9	35.8	41.8	47.8	59.9	71.9	84.0	96.2	108.3	120.5	132.7	144.9	169.5	194.2	PSI
Max PSI at E=0.85		5.1	10.1	15.2	20.3	25.4	30.5	35.6	40.7	50.9	61.2	71.4	81.7	92.1	102.4	112.8	123.2	144.1	165.0	PSI
Max PSI at E=0.7		4.2	8.3	12.6	16.7	20.9	25.1	29.3	33.5	41.9	50.4	58.8	67.3	75.8	84.3	92.9	101.4	118.6	135.9	PSI
<b>84"</b>	Volume	38.37	38.26	38.14	38.03	37.91	37.80	37.69	37.57	37.35	37.12	36.90	36.67	36.45	36.23	36.01	35.78	35.34	34.91	ft^3/ft
	Weight	56.1	112.1	168.5	223.9	279.6	335.3	390.9	446.4	557.1	667.6	777.7	887.4	996.8	1105.9	1214.7	1323.1	1538.9	1753.5	Lb/ft cs
Max PSI at E=1.00		5.6	11.1	16.7	22.3	27.9	33.4	39.0	44.6	55.9	67.1	78.4	89.7	101.0	112.4	123.7	135.1	158.0	181.0	PSI
Max PSI at E=0.85		4.7	9.5	14.2	18.9	23.7	28.4	33.2	37.9	47.5	57.0	66.6	76.2	85.9	95.5	105.2	114.9	134.3	153.8	PSI
Max PSI at E=0.7		3.9	7.8	11.7	15.6	19.5	23.4	27.3	31.3	39.1	47.0	54.9	62.8	70.7	78.7	86.6	94.6	110.6	126.7	PSI
<b>90"</b>	Volume	44.06	43.93	43.81	43.69	43.57	43.45	43.32	43.20	42.96	42.72	42.48	42.24	42.00	41.76	41.52	41.28	40.81	40.34	ft^3/ft
	Weight	60.1	120.1	180.5	239.9	299.7	359.3	418.9	478.5	597.2	715.7	833.8	951.6	1069.0	1186.1	1302.9	1419.3	1651.2	1881.8	Lb/ft cs
Max PSI at E=1.00		5.2	10.4	15.7	20.9	26.1	31.3	36.6	41.8	52.4	62.9	73.5	84.0	94.6	105.3	115.9	126.6	148.0	169.5	PSI
Max PSI at E=0.85		4.4	8.9	13.3	17.7	22.2	26.6	31.1	35.6	44.5	53.5	62.4	71.4	80.4	89.5	98.5	107.6	125.8	144.1	PSI
Max PSI at E=0.7		3.6	7.3	11.0	14.6	18.3	21.9	25.6	29.3	36.6	44.0	51.4	58.8	66.2	73.7	81.1	88.6	103.6	118.6	PSI
<b>96"</b>	Volume	50.13	50.00	49.87	49.74	49.61	49.48	49.35	49.22	48.97	48.71	48.45	48.19	47.94	47.68	47.43	47.17	46.67	46.16	ft^3/ft
	Weight	64.1	128.1	192.6	255.9	319.7	383.4	447.0	510.5	637.3	763.8	889.9	1015.7	1141.2	1266.3	1391.1	1515.6	1763.5	2010.1	Lb/ft cs
Max PSI at E=1.00		4.9	9.8	14.8	19.6	24.6	29.5	34.4	39.4	49.3	59.2	69.1	79.1	89.0	99.0	109.0	119.0	139.2	159.4	PSI
Max PSI at E=0.85		4.2	8.3	12.6	16.7	20.9	25.1	29.3	33.5	41.9	50.3	58.7	67.2	75.7	84.2	92.7	101.2	118.3	135.5	PSI
Max PSI at E=0.7		3.4	6.9	10.3	13.8	17.2	20.6	24.1	27.6	34.5	41.4	48.4	55.3	62.3	69.3	76.3	83.3	97.4	111.6	PSI
<b>102"</b>	Volume	56.61	56.47	56.33	56.19	56.05	55.91	55.78	55.64	55.36	55.09	54.81	54.54	54.27	54.00	53.73	53.46	52.92	52.38	ft^3/ft
	Weight	68.1	136.2	204.6	272.0	339.8	407.5	475.1	542.6	677.4	811.9	946.1	1079.9	1213.4	1346.5	1479.3	1611.8	1875.7	2138.4	Lb/ft cs

<b>S = 4000</b>		<b>Rolled or Machined Cylinders</b>								© 2003 Pressure Vessel Engineering Ltd. <a href="http://www.pveng.com">www.pveng.com</a>										
no undertolerance removed, no corrosion allowance, ASME VIII-1 App 1-1		Phone: (519)-880-9808 Fax: (519) 880-9810																		
Head Thickness		0.063	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	Inch
Max PSI at E=1.00		4.6	9.3	13.9	18.6	23.2	27.9	32.5	37.2	46.5	55.9	65.2	74.6	84.0	93.5	102.9	112.4	131.3	150.4	PSI
Max PSI at E=0.85		3.9	7.9	11.9	15.8	19.7	23.7	27.6	31.6	39.5	47.5	55.5	63.4	71.4	79.4	87.5	95.5	111.6	127.8	PSI
Max PSI at E=0.7		3.2	6.5	9.8	13.0	16.2	19.5	22.8	26.0	32.6	39.1	45.7	52.2	58.8	65.4	72.0	78.7	91.9	105.3	PSI
<b>108"</b>	Volume	63.47	63.32	63.18	63.03	62.88	62.74	62.59	62.44	62.15	61.86	61.57	61.28	60.99	60.71	60.42	60.13	59.56	58.99	ft^3/ft
	Weight	72.1	144.2	216.7	288.0	359.8	431.5	503.1	574.7	717.5	860.0	1002.2	1144.0	1285.5	1426.7	1567.5	1708.0	1988.0	2266.7	Lb/ft cs
Max PSI at E=1.00		4.4	8.8	13.2	17.6	22.0	26.4	30.8	35.2	44.1	52.9	61.8	70.7	79.6	88.5	97.4	106.4	124.3	142.3	PSI
Max PSI at E=0.85		3.7	7.5	11.2	14.9	18.7	22.4	26.2	29.9	37.4	45.0	52.5	60.1	67.6	75.2	82.8	90.4	105.7	121.0	PSI
Max PSI at E=0.7		3.1	6.1	9.2	12.3	15.4	18.5	21.6	24.6	30.8	37.0	43.2	49.5	55.7	61.9	68.2	74.5	87.0	99.6	PSI
<b>114"</b>	Volume	70.73	70.57	70.42	70.26	70.11	69.95	69.80	69.64	69.34	69.03	68.72	68.42	68.11	67.81	67.50	67.20	66.60	66.00	ft^3/ft
	Weight	76.1	152.2	228.8	304.0	379.9	455.6	531.2	606.8	757.6	908.1	1058.3	1208.2	1357.7	1506.9	1655.7	1804.2	2100.3	2395.0	Lb/ft cs
Max PSI at E=1.00		4.2	8.3	12.5	16.7	20.9	25.1	29.3	33.4	41.8	50.3	58.7	67.1	75.6	84.0	92.5	101.0	118.0	135.1	PSI
Max PSI at E=0.85		3.5	7.1	10.7	14.2	17.7	21.3	24.9	28.4	35.6	42.7	49.9	57.0	64.2	71.4	78.6	85.9	100.3	114.9	PSI
Max PSI at E=0.7		2.9	5.8	8.8	11.7	14.6	17.5	20.5	23.4	29.3	35.2	41.1	47.0	52.9	58.8	64.8	70.7	82.6	94.6	PSI
<b>120"</b>	Volume	78.38	78.21	78.05	77.89	77.72	77.56	77.40	77.24	76.91	76.59	76.27	75.94	75.62	75.30	74.98	74.66	74.03	73.39	ft^3/ft
	Weight	80.1	160.2	240.8	320.1	399.9	479.6	559.3	638.8	797.7	956.2	1114.5	1272.3	1429.9	1587.1	1743.9	1900.5	2212.5	2523.3	Lb/ft cs
Max PSI at E=1.00		4.0	7.9	12.0	15.9	19.9	23.9	27.9	31.8	39.8	47.8	55.9	63.9	71.9	80.0	88.1	96.2	112.4	128.6	PSI
Max PSI at E=0.85		3.4	6.8	10.2	13.5	16.9	20.3	23.7	27.1	33.9	40.7	47.5	54.3	61.2	68.0	74.9	81.7	95.5	109.3	PSI
Max PSI at E=0.7		2.8	5.6	8.4	11.1	13.9	16.7	19.5	22.3	27.9	33.5	39.1	44.7	50.4	56.0	61.6	67.3	78.7	90.0	PSI
<b>126"</b>	Volume	86.42	86.25	86.07	85.90	85.73	85.56	85.39	85.22	84.88	84.54	84.20	83.86	83.53	83.19	82.85	82.52	81.85	81.18	ft^3/ft
	Weight	84.2	168.2	252.9	336.1	419.9	503.7	587.3	670.9	837.8	1004.4	1170.6	1336.5	1502.0	1667.2	1832.1	1996.7	2324.8	2651.6	Lb/ft cs
Max PSI at E=1.00		3.8	7.6	11.4	15.2	19.0	22.8	26.6	30.4	38.0	45.7	53.3	61.0	68.6	76.3	84.0	91.7	107.2	122.7	PSI
Max PSI at E=0.85		3.2	6.4	9.7	12.9	16.1	19.4	22.6	25.8	32.3	38.8	45.3	51.8	58.4	64.9	71.4	78.0	91.1	104.3	PSI
Max PSI at E=0.7		2.7	5.3	8.0	10.6	13.3	15.9	18.6	21.3	26.6	32.0	37.3	42.7	48.1	53.4	58.8	64.2	75.0	85.9	PSI
<b>132"</b>	Volume	94.85	94.67	94.49	94.31	94.14	93.96	93.78	93.60	93.24	92.89	92.53	92.18	91.82	91.47	91.11	90.76	90.06	89.36	ft^3/ft
	Weight	88.2	176.2	264.9	352.2	440.0	527.7	615.4	703.0	877.9	1052.5	1226.7	1400.6	1574.2	1747.4	1920.3	2092.9	2437.1	2779.9	Lb/ft cs
Max PSI at E=1.00		3.6	7.3	10.9	14.5	18.1	21.8	25.4	29.1	36.4	43.7	51.0	58.3	65.6	73.0	80.4	87.7	102.5	117.3	PSI
Max PSI at E=0.85		3.1	6.2	9.3	12.3	15.4	18.5	21.6	24.7	30.9	37.1	43.3	49.6	55.8	62.0	68.3	74.6	87.1	99.7	PSI
Max PSI at E=0.7		2.5	5.1	7.6	10.2	12.7	15.3	17.8	20.3	25.5	30.6	35.7	40.8	46.0	51.1	56.2	61.4	71.7	82.1	PSI
<b>138"</b>	Volume	103.68	103.49	103.30	103.12	102.93	102.74	102.56	102.37	102.00	101.62	101.25	100.88	100.51	100.14	99.77	99.40	98.67	97.93	ft^3/ft
	Weight	92.2	184.3	277.0	368.2	460.0	551.8	643.5	735.1	918.0	1100.6	1282.8	1464.8	1646.4	1827.6	2008.6	2189.1	2549.3	2908.2	Lb/ft cs
Max PSI at E=1.00		3.5	6.9	10.5	13.9	17.4	20.9	24.4	27.9	34.8	41.8	48.8	55.9	62.9	69.9	77.0	84.0	98.2	112.4	PSI
Max PSI at E=0.85		3.0	5.9	8.9	11.8	14.8	17.7	20.7	23.7	29.6	35.6	41.5	47.5	53.5	59.4	65.4	71.4	83.5	95.5	PSI
Max PSI at E=0.7		2.4	4.9	7.3	9.7	12.2	14.6	17.1	19.5	24.4	29.3	34.2	39.1	44.0	49.0	53.9	58.8	68.7	78.7	PSI
<b>144"</b>	Volume	112.90	112.70	112.51	112.31	112.12	111.92	111.73	111.53	111.14	110.75	110.37	109.98	109.59	109.20	108.82	108.43	107.67	106.90	ft^3/ft
	Weight	96.2	192.3	289.1	384.2	480.1	575.9	671.5	767.1	958.1	1148.7	1339.0	1528.9	1718.5	1907.8	2096.8	2285.4	2661.6	3036.5	Lb/ft cs
Max PSI at E=1.00		3.3	6.7	10.0	13.4	16.7	20.0	23.4	26.7	33.4	40.2	46.9	53.6	60.4	67.1	73.9	80.6	94.2	107.8	PSI
Max PSI at E=0.85		2.8	5.7	8.5	11.3	14.2	17.0	19.9	22.7	28.4	34.1	39.9	45.6	51.3	57.0	62.8	68.5	80.1	91.6	PSI
Max PSI at E=0.7		2.3	4.7	7.0	9.3	11.7	14.0	16.4	18.7	23.4	28.1	32.8	37.5	42.3	47.0	51.7	56.5	65.9	75.5	PSI
<b>150"</b>	Volume	122.51	122.31	122.10	121.90	121.70	121.49	121.29	121.09	120.68	120.28	119.87	119.47	119.06	118.66	118.26	117.86	117.06	116.26	ft^3/ft
	Weight	100.2	200.3	301.1	400.3	500.1	599.9	699.6	799.2	998.2	1196.8	1395.1	1593.1	1790.7	1988.0	2185.0	2381.6	2773.8	3164.8	Lb/ft cs

For Preliminary Use Only --- Contact Pressure Vessel Engineering Ltd. for pressure vessel design and drafting --- Use at your own risk

<b>S = 4000</b>		<b>Rolled or Machined Cylinders</b>								© 2003 Pressure Vessel Engineering Ltd. <a href="http://www.pveng.com">www.pveng.com</a>										
no undertolerance removed, no corrosion allowance, ASME VIII-1 App 1-1		Phone: (519)-880-9808 Fax: (519) 880-9810																		
Head Thickness		0.063	0.125	0.188	0.250	0.313	0.375	0.438	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.375	1.500	1.750	2.000	Inch
Max PSI at E=1.00		3.2	6.4	9.7	12.8	16.1	19.3	22.5	25.7	32.2	38.6	45.1	51.5	58.0	64.5	71.0	77.5	90.6	103.6	PSI
Max PSI at E=0.85		2.7	5.5	8.2	10.9	13.6	16.4	19.1	21.9	27.3	32.8	38.3	43.8	49.3	54.8	60.4	65.9	77.0	88.1	PSI
Max PSI at E=0.7		2.2	4.5	6.8	9.0	11.2	13.5	15.7	18.0	22.5	27.0	31.6	36.1	40.6	45.2	49.7	54.3	63.4	72.5	PSI
<b>156"</b>	Volume	132.52	132.31	132.09	131.88	131.67	131.46	131.25	131.04	130.61	130.19	129.77	129.35	128.93	128.51	128.09	127.68	126.84	126.01	ft^3/ft
	Weight	104.2	208.3	313.2	416.3	520.2	624.0	727.7	831.3	1038.3	1244.9	1451.2	1657.2	1862.9	2068.2	2273.2	2477.8	2886.1	3293.1	Lb/ft cs
Max PSI at E=1.00		3.1	6.2	9.3	12.4	15.5	18.6	21.7	24.8	31.0	37.2	43.4	49.6	55.9	62.1	68.4	74.6	87.2	99.8	PSI
Max PSI at E=0.85		2.6	5.3	7.9	10.5	13.1	15.8	18.4	21.0	26.3	31.6	36.9	42.2	47.5	52.8	58.1	63.4	74.1	84.8	PSI
Max PSI at E=0.7		2.2	4.3	6.5	8.7	10.8	13.0	15.2	17.3	21.7	26.0	30.4	34.7	39.1	43.5	47.9	52.2	61.0	69.8	PSI
<b>162"</b>	Volume	142.92	142.70	142.48	142.26	142.04	141.82	141.60	141.38	140.94	140.50	140.06	139.63	139.19	138.76	138.32	137.89	137.02	136.16	ft^3/ft
	Weight	108.2	216.3	325.3	432.3	540.2	648.0	755.7	863.4	1078.4	1293.0	1507.4	1721.4	1935.0	2148.4	2361.4	2574.0	2998.4	3421.4	Lb/ft cs
Max PSI at E=1.00		3.0	6.0	9.0	11.9	14.9	17.9	20.9	23.9	29.9	35.8	41.8	47.8	53.9	59.9	65.9	71.9	84.0	96.2	PSI
Max PSI at E=0.85		2.5	5.1	7.6	10.1	12.7	15.2	17.7	20.3	25.4	30.5	35.6	40.7	45.8	50.9	56.0	61.2	71.4	81.7	PSI
Max PSI at E=0.7		2.1	4.2	6.3	8.3	10.4	12.5	14.6	16.7	20.9	25.1	29.3	33.5	37.7	41.9	46.1	50.4	58.8	67.3	PSI
<b>168"</b>	Volume	153.71	153.48	153.25	153.02	152.79	152.57	152.34	152.11	151.66	151.20	150.75	150.29	149.84	149.39	148.94	148.49	147.59	146.69	ft^3/ft
	Weight	112.2	224.4	337.3	448.4	560.3	672.1	783.8	895.4	1118.5	1341.2	1563.5	1785.5	2007.2	2228.6	2449.6	2670.3	3110.6	3549.7	Lb/ft cs
Max PSI at E=1.00		2.9	5.8	8.7	11.5	14.4	17.3	20.2	23.0	28.8	34.6	40.4	46.2	52.0	57.8	63.6	69.4	81.1	92.8	PSI
Max PSI at E=0.85		2.4	4.9	7.4	9.8	12.2	14.7	17.1	19.6	24.5	29.4	34.3	39.3	44.2	49.1	54.1	59.0	68.9	78.9	PSI
Max PSI at E=0.7		2.0	4.0	6.1	8.1	10.1	12.1	14.1	16.1	20.2	24.2	28.3	32.3	36.4	40.5	44.5	48.6	56.8	65.0	PSI
<b>174"</b>	Volume	164.89	164.66	164.42	164.18	163.95	163.71	163.47	163.24	162.77	162.30	161.83	161.36	160.89	160.42	159.95	159.48	158.55	157.63	ft^3/ft
	Weight	116.2	232.4	349.4	464.4	580.3	696.1	811.9	927.5	1158.6	1389.3	1619.6	1849.7	2079.4	2308.8	2537.8	2766.5	3222.9	3678.0	Lb/ft cs
Max PSI at E=1.00		2.8	5.6	8.4	11.1	13.9	16.7	19.5	22.3	27.9	33.4	39.0	44.6	50.3	55.9	61.5	67.1	78.4	89.7	PSI
Max PSI at E=0.85		2.4	4.7	7.1	9.5	11.8	14.2	16.6	18.9	23.7	28.4	33.2	37.9	42.7	47.5	52.3	57.0	66.6	76.2	PSI
Max PSI at E=0.7		1.9	3.9	5.9	7.8	9.7	11.7	13.6	15.6	19.5	23.4	27.3	31.3	35.2	39.1	43.0	47.0	54.9	62.8	PSI
<b>180"</b>	Volume	176.47	176.22	175.98	175.73	175.49	175.25	175.00	174.76	174.27	173.78	173.30	172.81	172.32	171.84	171.36	170.87	169.91	168.95	ft^3/ft
	Weight	120.2	240.4	361.4	480.5	600.4	720.2	839.9	959.6	1198.6	1437.4	1675.8	1913.8	2151.6	2388.9	2626.0	2862.7	3335.2	3806.3	Lb/ft cs
Max PSI at E=1.00		2.7	5.4	8.1	10.8	13.5	16.2	18.9	21.6	27.0	32.4	37.8	43.2	48.6	54.1	59.5	64.9	75.8	86.8	PSI
Max PSI at E=0.85		2.3	4.6	6.9	9.1	11.4	13.7	16.0	18.3	22.9	27.5	32.1	36.7	41.3	45.9	50.6	55.2	64.5	73.8	PSI
Max PSI at E=0.7		1.9	3.8	5.7	7.5	9.4	11.3	13.2	15.1	18.9	22.7	26.4	30.2	34.0	37.8	41.6	45.5	53.1	60.7	PSI
<b>186"</b>	Volume	188.44	188.19	187.93	187.68	187.43	187.17	186.92	186.67	186.16	185.66	185.16	184.66	184.15	183.65	183.15	182.65	181.66	180.66	ft^3/ft
	Weight	124.3	248.4	373.5	496.5	620.4	744.2	868.0	991.7	1238.7	1485.5	1731.9	1978.0	2223.7	2469.1	2714.2	2959.0	3447.4	3934.6	Lb/ft cs
Max PSI at E=1.00		2.6	5.2	7.8	10.4	13.0	15.6	18.3	20.9	26.1	31.3	36.6	41.8	47.1	52.4	57.6	62.9	73.5	84.0	PSI
Max PSI at E=0.85		2.2	4.4	6.7	8.9	11.1	13.3	15.5	17.7	22.2	26.6	31.1	35.6	40.0	44.5	49.0	53.5	62.4	71.4	PSI
Max PSI at E=0.7		1.8	3.6	5.5	7.3	9.1	11.0	12.8	14.6	18.3	21.9	25.6	29.3	33.0	36.6	40.3	44.0	51.4	58.8	PSI
<b>192"</b>	Volume	200.80	200.54	200.28	200.02	199.76	199.49	199.23	198.97	198.45	197.93	197.41	196.89	196.38	195.86	195.34	194.83	193.80	192.77	ft^3/ft
	Weight	128.3	256.4	385.6	512.5	640.5	768.3	896.1	1023.7	1278.8	1533.6	1788.0	2042.1	2295.9	2549.3	2802.4	3055.2	3559.7	4062.9	Lb/ft cs
Max PSI at E=1.00		2.5	5.1	7.6	10.1	12.6	15.2	17.7	20.2	25.3	30.4	35.5	40.6	45.7	50.8	55.9	61.0	71.2	81.5	PSI
Max PSI at E=0.85		2.1	4.3	6.5	8.6	10.7	12.9	15.1	17.2	21.5	25.8	30.2	34.5	38.8	43.1	47.5	51.8	60.5	69.2	PSI
Max PSI at E=0.7		1.8	3.5	5.3	7.1	8.8	10.6	12.4	14.2	17.7	21.3	24.8	28.4	32.0	35.5	39.1	42.7	49.8	57.0	PSI
<b>198"</b>	Volume	213.55	213.29	213.01	212.75	212.48	212.21	211.94	211.67	211.13	210.60	210.06	209.53	208.99	208.46	207.93	207.39	206.33	205.27	ft^3/ft
	Weight	132.3	264.5	397.6	528.6	660.5	792.4	924.1	1055.8	1318.9	1581.7	1844.2	2106.3	2368.1	2629.5	2890.6	3151.4	3672.0	4191.2	Lb/ft cs

For Preliminary Use Only --- Contact Pressure Vessel Engineering Ltd. for pressure vessel design and drafting --- Use at your own risk